



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,360	10/21/2003	Sydney Gearing	GSCA-10002/01	4243
25006	7590	11/24/2006	EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C			VANAMAN, FRANK BENNETT	
PO BOX 7021			ART UNIT	
TROY, MI 48007-7021			PAPER NUMBER	

3618

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/690,360	Applicant(s) GEARING, SYDNEY	
	Examiner Frank Vanaman	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-15, 17-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-15, 17-23, 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Nov. 2, 2006 has been entered.

Status of Claims

2. Claims 1, 4-15, 17-23 and 25-34 are pending. Claims 2, 3, 16 and 24 have been canceled.

Claim Rejections - 35 USC § 112

3. Claims 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 31, line 2, the recitation of a second exhaust passage abutting itself is confusing, as is the recitation of the second passage being integral with itself in claim 32, line 2.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 4, 5, 8-15, 17, 18, 21, 23, and 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto (US 6,334,501) in view of Petley (US 6,591,935). Kawamoto teaches a sound reducing component for a vehicle which may be used off road, and in combination with at least one vehicle silencer (4), including an adapter (30) having an internal wall which defines an exhaust chamber, an inlet (3a) at an open end thereof, an exhaust port (connecting 30 and 32), oriented at an angle of between 0 and 90 degrees from an axis of the exhaust discharge chamber, a discharge opening (lateral opening in 31 extending to 7 and 50a), the port capable of communicating exhaust and sound to the atmosphere (through 3), the discharge opening operable to communicate exhaust into a passage (50a), a U-joint (5) having first and second ends, the first end being connected to the exhaust passage (50a), the

Art Unit: 3618

second end being connected to an extension (e.g., 40, 40a). The reference to Kawamoto fails specifically teach the area of the exhaust port as being smaller than that of the open end of the chamber. In that some flow is directed to the port and some is directed to the U joint and thence the extension, it would have been obvious to one of ordinary skill in the art at the time of the invention to constrict the opening into the port so as to influence the exhaust flow to pass through both the port and the discharge opening. As regards claims 8, 9, 11, 12, 27 and 28 inasmuch as the reference to Kawamoto is directed to use with an exhaust system carrying high temperature gas, and further directed to quieting of the exhaust flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to make at least a portion of the component from a heat resistant material so as to ensure that the material does not break down in contact with high temperature exhaust, and further it would have been obvious to one of ordinary skill in the art at the time of the invention to make at least a portion of the component from a sound deadening material so as to ensure that as little noise as possible is transmitted to the exterior environment, as far as practical.

The reference to Kawamoto fails to teach that the adapter is arranged to be placed with its inlet connected to the exhaust end of a silencer. Petley teaches that it is well known to provide an exhaust system having a pre-existing silencer (e.g., 14) and add a further exhaust-silencing device (e.g., 28) downstream of the existing silencer, to further reduce the noise output. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the adapter arrangement taught by Kawamoto downstream of a first silencer, e.g., such that the input 3a is connected to the discharge of the silencer, as taught by Petley, for the purpose of providing yet further sound reduction. As regards claim 13, inasmuch as Kawamoto teaches that at least the output end of the exhaust passage (50a) is directed to be substantially parallel with the input (e.g., 3a, downstream end of 2a, note figure 4), it would have been obvious to one of ordinary skill in the art at the time of the invention to place the upstream silencer taught by Kawamoto as modified by Petley in a portion of the exhaust line which is parallel with the passage (e.g., the downstream section of 2a) for the purpose of locating the various sound reducing components closely proximate each

other. As regards claim 23, while the reference to Kawamoto as modified by Petley fails to explicitly teach the provision of a fastener provided on the exhaust passage of the adapter, which is operable to secure the adapter to the vehicle, Kawamoto does teach the provision of fastening devices (e.g., 61, 62) for connecting to the vehicle, and it would have been obvious to one of ordinary skill in the art at the time of the invention to locate a fastener proximate the exhaust passage of Kawamoto as modified by Petley, in order to accommodate connection to a vehicle having a fastener receiving portion located more forwardly, facilitating the interchangeable use of the system on plural vehicle structures.

6. Claims 6, 7, 19, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto in view of Holmes (US 1,591,088). The reference to Kawamoto is discussed above and fails to teach the explicit provision of separate connecting elements for securing the first and second ends of the U-joint to the exhaust passage and extension, respectively. Holmes teaches the use of a connector device (e.g., 22) for connecting portions of an exhaust system together, to allow an adjustable connection. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the connection between the U-joint and exhaust passage and extension taught by Kawamoto with separate connector elements such as taught by Holmes, for the purpose of allowing the exhaust structure to be easily assembled together.

Response to Amendment/Comments

7. Initially the examiner notes that applicant's amendment to claims 31 and 32 introduces confusing language into the claim recitations, and applicant may desire to note that applicant's language is the same as was presented in the amendment after Final Rejection, which language was commented upon in the examiner's advisory action mailed Sept 1, 2006.

Applicant's comments concerning the restriction of flow are noted but are not persuasive in this case, primarily for the reasons set forth previously. It is very well known to adjust the relative sizes of a pair (or more) of flow opening to control relative quantities of flow through the passage. Note additionally that compared to the chamber

Art Unit: 3618

immediately preceding it, the exhaust port taught by Kawamoto constitutes a substantial constriction on its own. A constriction of an exhaust line on its own is additionally well known, for the purpose of adjusting a back-pressure on the exhaust system. As such, for at least the reason of adjusting the relative flow quantities through the two exhaust routes, it is deemed obvious to provide one opening of smaller size than another. Applicant has asserted that "none of the cited reference[s] even suggest that it would be desirable to construct an exhaust port that is designed to restrict the flow of exhaust." The examiner disagrees. The cited reference to Hwang teaches such a restriction for the purpose of controlling back-pressure.

Applicant has again argued that the claim rejections constitute a hindsight reconstruction, however the examiner notes, as was noted previously, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made (in this case, that it is well known to adjust the relative size of an opening to adjust the flow there-through), and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. In the final office action, the examiner commented: "If applicant does believe that it is not within the skill of the ordinary practitioner to adjust the size of an opening or port for the purpose of adjusting the flow there-through (absent any further conditional changes) applicant should so state unequivocally on the record." In the after-final response to the office action and in the comments submitted with the Request for Continued Examination, applicant has made no such statement.

Conclusion

8. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Art Unit: 3618

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618

Handwritten signature of F. Vanaman, dated 11/14/06.